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| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|-------------------------|------------------|
| 10/003,200                       | 11/15/2001  | Shigefumi Odaohhara  | JP920000409US1          | 4153             |
| 25299                            | 7590        | 03/08/2004           | EXAMINER                |                  |
| IBM CORPORATION                  |             |                      | LAU, TUNG S             |                  |
| PO BOX 12195                     |             |                      | ART UNIT                | PAPER NUMBER     |
| DEPT 9CCA, BLDG 002              |             |                      |                         | 2863             |
| RESEARCH TRIANGLE PARK, NC 27709 |             |                      | DATE MAILED: 03/08/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |  |
|------------------------------|-----------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s)                               |
|                              | 10/003,200      | ODAOHHARA, SHIGEFUMI<br><i>(Signature)</i> |
|                              | Examiner        | Art Unit                                   |
|                              | Tung S Lau      | 2863                                       |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 November 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
  - 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,4-6,9 and 10 is/are rejected.
- 7) Claim(s) 3 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \*    c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

|  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 7, 8 stand withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention as noted in office action on 6-25-2003.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, 9, 10, 4, 5, 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukuda (U.S. Patent 6,295,002).

Regarding claim 1:

Fukuda discloses a method of calculating capacity of an intelligent battery equipped with a current measurement circuit to measure an electric current value on which calculation of battery capacity is based (abstract), comprising the steps of: (a) sending, from a system to the intelligent battery, a notice that it shifts to a low electric power consumption mode, and a consumption electric current value or a consumption electric power value in the low electric power

consumption mode unique to the system, when the system using the intelligent battery shifts from a normal operational mode to the low electric power consumption mode (Col. 3, Lines 1-60); (b) performing subtraction of capacity data of the intelligent battery based on the received consumption electric current value or consumption electric power value in the low electric power consumption mode, and disabling capacity calculation by the current measurement circuit (Col. 2, Lines 4763); (c) sending, from the system to the intelligent battery, a notice of shifting to the normal operational mode, and stopping the subtraction of capacity data based on the consumption electric current value or consumption electric power value in the low electric power consumption mode., and enabling capacity calculation by the current measurement circuit, when the system using the intelligent battery shifts from the low electric power consumption mode to the normal operational mode (Col. 3-4, Lines 39-23).

Regarding claim 6:

Fukuda discloses a method of calculating capacity of an intelligent battery equipped with a current measurement circuit to measure an electric current value on which calculation of battery capacity is based (abstract), comprising the steps of: (a) on a shift of the system from a normal operational mode to a low electric power consumption mode and thereafter to the normal operational mode, calculating on the system side consumption battery capacity data assumed to have been spent during the low electric power consumption mode based on a

consumption electric current value or a consumption electric power value in the low electric power consumption mode unique to the system (Col. 3, Lines 39-60).

(b) sending consumption battery capacity data from the system side to said intelligent battery side (Col. 3-4, Lines 39-15) ; (c) on said intelligent battery side, calculating current battery capacity based on said consumption battery capacity data (Col. 2, Lines 48-67).

Regarding claim 9, 4, 5, 2:

Fukuda discloses a portable electronic device and method, comprising (a) a first system component for operating with supplied electric power in the normal operational mode but not operating with no supplied electric power in the low electric power consumption mode (Col. 2, Lines 43-67); (b) a second system component for operating with supplied electric power both in the normal operational mode and in the low electric power consumption mode (Col. 11, Lines 47-55); and (c) a controller (fig. 1, unit 43a)for: (i) performing control to supply electric power to said first and second system components, and supply electric power to said second system component and stop supply of electric power to said first system component in the low electric power consumption mode (abstract); (ii) when shifting from the normal operational mode to the low electric power consumption mode, sending to an intelligent battery a notice of shifting to the low electric power consumption mode and also sending a consumption electric current value or a consumption electric power value unique to the system (Col. 3, Lines 38-67) and (iii) when shifting from the low electric

power consumption mode to the normal operational mode, sending from the system to the intelligent battery a notice of shifting to the normal operational mode; and said intelligent battery characterized by: (iv) in the low electric power consumption mode, performing subtraction of capacity data based on the received consumption electric current value or consumption electric power value in the mode, and disabling capacity calculation on the current measurement circuit on the other hand (Col. 2, Lines 43-67) ; (v) when shifting from the low electric power consumption mode to the normal operational mode, stopping the subtraction of capacity data based on the consumption electric current value or consumption electric power value in the low electric power consumption mode, and enabling capacity calculation by the current measurement circuit on the other hand (Col. 2, Lines 43-67), low power is a soft-off state (Col. 3, Lines 33-60, fig. 1, unit 44, 61).

Regarding claim 10:

Fukuda discloses a portable electronic device, comprising: (a) a first system component for operating with supplied electric power in a normal operational mode but not operating with no supplied electric power in a low electric power consumption mode (abstract) (b) a second system component for operating with supplied electric power both in the normal operational mode and in the low electric power consumption mode (Col. 3, Lines 1-35); and (c) a controller for (i) performing control to supply electric power to said first and second system

components, and supply electric power to said second system component and stop supply  $I_0$  of electric power to said first system component in the low electric power consumption mode (Col. 3, Lines 40-67); (ii) when shifting from the normal operational mode to the low electric power consumption mode, sending from a system to an intelligent battery a notice of shifting to  $I_a$  the low electric power consumption mode and also sending consumption battery capacity data assumed to be consumed during the low electric power consumption mode based on a consumption electric current value or a consumption electric power value in the low electric power consumption mode unique to the second system component calculated on the system side (Col. 3-4, Lines 38-43); and (iii) when shifting from the low electric power consumption mode to the normal operational mode, sending from the system to the intelligent battery a notice of shifting to the normal operational mode; and said intelligent battery characterized by: (iv) performing subtraction of the capacity data based on the received consumption battery capacity data in the low electric power consumption mode, and disabling capacity calculation on the current measurement circuit on the other hand (Col. 2, Lines 47-67); (v) when shifting from the low electric power consumption mode to the normal operational mode, stopping the subtraction of capacity data based on the consumption current capacity data in the low electric power consumption mode, and enabling capacity calculation by the current measurement circuit on the other hand (Col. 3-4, Lines 38-43).

***Claim Objections***

3. Claims 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach the use of Optional MfgFunction 1 to Optional MfgFunction5 of SBS command.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

4. Applicant's arguments filed 11/28/2003 have been fully considered but they are not persuasive.

A. Applicant argues that the prior art does not show the 'intelligent battery equipped with a current measurement circuit'; Fukuda discloses 'intelligent battery equipped with a current measurement circuit' in (Col. 3, Lines 1-60, fig. Fig. 1, unit 62a, 43a).

B. Applicant argues that the prior art does not show the 'calculating capacity of an intelligent 'battery equipped with a current measurement circuit to measure an electric current value on which calculation of battery capacity is based'; Fukuda discloses 'calculating capacity of an intelligent 'battery equipped with a current measurement circuit to measure an electric current value on which calculation of battery capacity is based' in (Col. 2-3, Lines 43-60, fig. Fig. 1, unit 62a, 43a, Col. 11, Lines 33-55).

C. Applicant continue to argue that the prior art does not show the 'sending from a system to the intelligent battery, a notice that it shifts to a low electric power consumption mode, and a consumption electric current value or a consumption electric power value in the low electric power consumption mode unique to the system, when the system using the intelligent battery shifts from a normal operational mode to the low electric power consumption mode'; Fukuda discloses 'sending from a system to the intelligent battery, a notice that it shifts to a low electric power consumption mode, and a consumption electric current value or a consumption electric power value in the low electric power consumption mode unique to the system, when the system using the intelligent battery shifts from a normal operational mode to the low electric power consumption mode' in Col. 2-4, Lines 43-15, Col. 11, Lines 33-55).

D. Applicant continue to argue that the prior art does not show the 'performing subtraction of capacity data of the intelligent battery based on the received consumption electric current value or consumption electric power value in the low electric power consumption mode, and disabling capacity calculation by the current measurement circuit'. Fukuda discloses the 'performing subtraction of capacity data of the intelligent battery based on the received consumption electric current value or consumption electric power value in the low electric power consumption mode, and disabling capacity calculation by the current measurement circuit' in Col. 3-4, Lines 38-42, Col. 11, Lines 33-55.

E. Applicant continue to argue that the prior art does not show the 'sending, from a system to the intelligent battery, a notice that it shifts to a low electric power consumption mode, and a consumption electric current value or a consumption electric power value in the low electric power consumption mode unique to the system, when the system using the intelligent battery shifts from a normal operational mode to the low electric power consumption mode'; Fukuda discloses 'sending, from a system to the intelligent battery, a notice that it shifts to a low electric power consumption mode, and a consumption electric current value or a consumption electric power value in the low electric power consumption mode unique to the system, when the system using the intelligent battery shifts from a normal operational mode to the low electric power consumption mode' in Col. 3-4, Lines 33-43.

F. Applicant continue to argue that the prior art does not show the 'capacity calculation'; Fukuda clearly discloses the capacity calculation in Col. 11, Lines 34-55.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 703-305-3309. The examiner can normally be reached on M-F 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for regular communications and 703-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TC2800 RightFAX Telephone Numbers : TC2800 Official Before-Final RightFAX - (703) 872-9318, TC2800 Official After-Final RightFAX - (703) 872-9319

TC2800 Customer Service RightFAX - (703) 872-9317

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